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AMENDMENTS TO THE CLAIMS

2 Please amend the claims of the present application as set forth below. In
3 accordance with the PTO's revised amendment format, a detailed listing of all
4 claims has been provided. A status identifier is provided for each claim in a
5 parenthetical expression following each claim number. Changes to the claims are
6 shown by strikethrough (for deleted matter) or underlining (for added matter).

7

8 Claims 1 – 6 and 8-20 were originally filed.

9 The Office renumbered the claims 1-19.

10 Accordingly, claims 1 – 19 (as renumbered) are pending.

11

12 1. (Original) In a server computer system having memory, a method of
13 creating a class in memory, wherein the class is used by the server computer
14 system to create server-side objects for dynamically rendering web page content,
15 the web page content delivered to a client-side computer system and displayed as a
16 web page on the client computer system, said method comprising:

17 receiving a request from the client specifying a dynamic web page content
18 file;

19 processing the dynamic web page content file to produce a source code file
20 containing source code that represent control objects declared in the web page
21 content file; and

22 compiling the source code file to produce a class from which a set of
23 hierarchical objects can be instantiated to produce web page authoring language
24 that produces a web page for display;

25 wherein the source code file declaratorily refers to one or more additional

1 dynamic web page content files, each reference to the one or more additional
2 dynamic web page content files correspond to a single hierarchical object within
3 the set of hierarchical objects.

4

5 2. (Original) The method according to claim 1, wherein the source code
6 file may be referenced by a second source code file as one of the one or more
7 additional dynamic web page content files.

8

9 3. (Original) The method as defined in claim 2, wherein the dynamic web
10 page content file is a server-side declaration datastore.

11

12 X 4. (Original) The method as defined in claim 2, wherein the class is stored
13 in cache memory on the server computer system and is available to instantiate
14 objects in response to another request specifying the dynamic web page content
15 file.

16

17 5. (Original) The method as defined in claim 2, wherein the class is stored
18 on a magnetic storage medium and is available to instantiate objects in response to
19 another request specifying the dynamic web page content file.

20

21 6. (Original) The method as defined in claim 2, wherein the step
22 processing the dynamic web page content file comprises:

23 parsing the dynamic web page content file to store portions of the file into a
24 data model, the data model comprises a plurality of data objects linked in a
25 hierarchical manner;

1 generating source code related to declaration information based on an
2 analysis of the data model during a first phase;

3 writing the source code related to declaration information to the source
4 code file;

5 generating source code related to control object information based on an
6 analysis of the data model during a second phase; and

7 writing the source code related to control object information to the source
8 code file during the second phase;

9 where the one or more of the plurality of data objects correspond to
10 compiled versions of one or more additional dynamic web page content file.

11
12 X 7. (Currently Amended) A method as defined in claim 7-6, wherein the
13 method further comprises:

14 generating source code related to rendering information based on an
15 analysis of the data model during a third phase; and

16 writing the source code related to rendering information to the
17 source code file during the third phase.

18
19 8. (Original) The method as defined in claim 2, further comprising the
20 following:

21 prior to the step of processing the dynamic web page content file,
22 determining whether the class related to the received request has been compiled
23 and stored in memory; and

24 if the class has been compiled and stored in memory, skipping the
25 processing step, otherwise continue with the processing step.

1
2 9. (Original) A computer data signal embodied in a carrier wave by a
3 computing system having memory and encoding a computer program for
4 executing a computer process creating a class in memory, wherein the class is used
5 by the server computer system to create server-side objects for dynamically
6 rendering web page content, the web page content delivered to a client-side
7 computer system and displayed as a web page on the client computer system, said
8 computer process comprising:

9 receiving a request from the client specifying a dynamic web page content
10 file;

11 processing the dynamic web page content file to produce a source code file
12 containing source code that represent control objects declared in the web page
13 content file; and

14 compiling the source code file to produce a class from which a set of
15 hierarchical objects can be instantiated to produce web page authoring language
16 that produces a web page for display;

17 wherein dynamic web page content file declaratorily refers to one or more
18 additional dynamic web page content files, each reference to the one or more
19 additional web page content files correspond to a single hierarchical object within
20 the set of hierarchical objects.

21
22 10. (Original) A computer program storage medium readable by a
23 computer system having memory and encoding a computer program for executing
24 a computer process creating a class in memory, wherein the class is used by the
25 server computer system to create server-side objects for dynamically rendering



1 web page content, the web page content delivered to a client-side computer system
2 and displayed as a web page on the client computer system, said computer process
3 comprising:

4 receiving a request from the client specifying a dynamic web page content
5 file;

6 processing the dynamic web page content file to produce a source code file
7 containing source code that represent control objects declared in the web page
8 content file; and

9 compiling the source code file to produce a class from which a set of
10 hierarchical objects can be instantiated to produce web page authoring language
11 that produces a web page for display;

12 wherein dynamic web page content file declaratorily refers to one or more
13 additional dynamic web page content files, each reference to the one or more
14 additional web page content files correspond to a single hierarchical object within
15 the set of hierarchical objects.

16

17 11. (Currently Amended) In a server computer system having memory, a
18 method of creating a plurality of web page responses having dynamically rendered
19 web page content, the web page responses delivered to one or more client-side
20 computer systems and displayed as a web pages on the client computer systems,
21 said method comprising:

22 receiving a request from the client computer system for the web page,
23 wherein the request identifies a dynamic web page content file;

24 creating a hierarchical data model containing one or more control objects to
25 store elements of the dynamic web page content file;

1 generating a source code file related to the dynamic web page content file
2 based on the evaluation of the data model;

3 compiling the source code file to create a compiled class in memory;
4 returning a class reference to the server computer system enabling the
5 server computer system to instantiate server-side processing objects from that
6 class to dynamically generate web page content;

7 rendering the dynamic web page content into a web page response for
8 delivery to the client computer system;

9 conducting the web page response to the requesting client computer system;
10 receiving a second request for the web page ~~for the web page~~, wherein the
11 request identifies a dynamic web page content file;

12 determining that a compiled class for that dynamic web page content file
13 resides in memory;

14 returning a class reference to the server computer system enabling the
15 server computer system to instantiate server-side processing objects from that
16 class to dynamically generate web page content;

17 rendering the dynamic web page content into a second web page response;
18 and

19 conducting the second web page response to the requesting client computer
20 system;

21 wherein the dynamic web page content file declaratorily refers to one or
22 more additional dynamic web page content files, each reference to the one or more
23 additional dynamic web page content files correspond to a single hierarchical
24 object within the set of hierarchical objects.

1 12. (Currently Amended) A computer program storage medium readable
2 by a computer system having memory and encoding a computer program for
3 executing a computer process creating a plurality of web page responses having
4 dynamically rendered web page content, the web page responses delivered to one
5 or more client-side computer systems and displayed as a web pages on the client
6 computer systems, said computer process comprising:

7 receiving a request from the client computer system for the web page,
8 wherein the request identifies a dynamic web page content file;

9 creating a hierarchical data model containing one or more control objects to
10 store elements of the dynamic web page content file;

11 generating a source code file related to the dynamic web page content file
12 based on the evaluation of the data model;

13 compiling the source code file to create a compiled class in memory;

14 returning a class reference to the server computer system enabling the
15 server computer system to instantiate server-side processing objects from that
16 class to dynamically generate web page content;

17 rendering the dynamic web page content into a web page response for
18 delivery to the client computer system;

19 conducting the web page response to the requesting client computer system;

20 receiving a second request for the web page ~~for the web page~~, wherein the
21 request identifies a dynamic web page content file;

22 determining that a compiled class for that dynamic web page content file
23 resides in memory;

24 returning a class reference to the server computer system enabling the
25 server computer system to instantiate server-side processing objects from that

1 class to dynamically generate web page content;
2 rendering the dynamic web page content into a second web page response;

3 and

4 conducting the second web page response to the requesting client computer
5 system;

6 wherein the dynamic web page content file declaratorily refers to one or
7 more additional dynamic web page content files, each reference to the one or more
8 additional dynamic web page content files correspond to a single hierarchical
9 object within the set of hierarchical objects.

10

11 13. (Currently Amended) A computer data signal embodied in a carrier
12 wave by a computing system having memory and encoding a computer program
13 for executing a computer process creating a plurality of web page responses
14 having dynamically rendered web page content, the web page responses delivered
15 to one or more client-side computer systems and displayed as a web pages on the
16 client computer systems, said computer process comprising:

17 receiving a request from the client computer system for the web page,
18 wherein the request identifies a dynamic web page content file;

19 creating a hierarchical data model containing one or more control objects to
20 store elements of the dynamic web page content file;

21 generating a source code file related to the dynamic web page content file
22 based on the evaluation of the data model;

23 compiling the source code file to create a compiled class in memory;

24 returning a class reference to the server computer system enabling the
25 server computer system to instantiate server-side processing objects from that

1 class to dynamically generate web page content;
2 rendering the dynamic web page content into a web page response for
3 delivery to the client computer system;
4 conducting the web page response to the requesting client computer system;
5 receiving a second request for the web page ~~for the web page~~, wherein the
6 request identifies a dynamic web page content file;

7 determining that a compiled class for that dynamic web page content file
8 resides in memory;

9 returning a class reference to the server computer system enabling the
10 server computer system to instantiate server-side processing objects from that
11 class to dynamically generate web page content;

12 rendering the dynamic web page content into a second web page response;
13 and

14 conducting the second web page response to the requesting client computer
15 system;

16 wherein the dynamic web page content file declaratorily refers to one or
17 more additional dynamic web page content files, each reference to the one or more
18 additional dynamic web page content files correspond to a single hierarchical
19 object within the set of hierarchical objects.

20
21 14. (Original) A computer program product encoding a computer program
22 for executing in a computer system a computer process for creating a class in
23 memory, wherein the class is used by a server computer system to create server-
24 side objects for dynamically rendering authoring language elements, the elements
25 are delivered to a client-side computer system and processed on the client

1 computer system, said process comprising:

2 receiving a request from the client computer system for the resource,
3 wherein the request identifies a dynamic web page resource;

4 processing the resource to generate a source code file related to the
5 resource; and

6 compiling the source code file to create a compiled class in memory to
7 enable the instantiation of hierarchical objects of the compiled class;

8 wherein the source code file declaratorily refers to one or more dynamic
9 web page content files, each reference to the one or more dynamic web page
10 content files correspond to a single hierarchical object within the hierarchical
11 objects.

12
13 15. (Currently Amended) A computer program product encoding a
14 computer program for executing in a computer system a computer process for
15 creating a class in memory as defined in claim 1415, wherein the processing step
16 of creating a data model comprises:

17 parsing the resource to separate the resource into logical elements
18 and identify relationships between the logical elements;

19 creating a plurality of hierarchically related data structures forming a
20 hierarchical data model; and

21 storing portions of the resource in the data structures.

22
23 16. (Currently Amended) A computer program product encoding a
24 computer program for executing in a computer system a computer process for
25 creating a class in memory as defined in claim 1415, wherein the processing step

1 comprises the following steps:

2 performing a first analysis of the resource to generate source code related to
3 variable declaration information;

4 performing a second analysis of the resource to generate source code
5 related to control object information;

6 performing a third analysis of the resource to generate source code related
7 to rendering information; and

8 storing the source code in the source code file.

9

10 17. (Currently Amended) A computer program product encoding a
11 computer program for executing in a computer system a computer process for
12 creating a class in memory as defined in claim 15¹⁶, wherein the processing step
13 of generating source code ~~comprises~~ further comprises the step of generating an
14 intermediate data structure, wherein the source code is generated from the
15 intermediate data structure.

16

17 18. (Currently Amended) A computer program product encoding a
18 computer program for executing in a computer system a computer process for
19 creating a class in memory as defined in claim ~~18~~ 17, wherein the processing step
20 of generating an intermediate data structure further comprises:

21 performing a first analysis of the resource to generate intermediate data
22 structure elements related to variable declaration information;

23 performing a second analysis of the resource to generate intermediate data
24 structure elements related to control object information;

25 performing a third analysis of the resource to generate intermediate data

1 structure elements related to rendering information; and
2 generating source code from the intermediate data structure.

3

4 19. (Currently Amended) A computer program product encoding a
5 computer program for executing in a computer system a computer process for
6 creating a class in memory as defined in claim 20-18, wherein the intermediate
7 data structure is a generic description that may be translated into a plurality of
8 source code language files, wherein at least one source code file is different from
9 another source code language file.

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